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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,541	01/04/2002	Andrew Brown	COMP:0229 P01-3580	7276

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Intellectual Property Administration
Legal Dept., M/S 35
P.O. Box 272400
Ft. Collins, CO 80527-2400

EXAMINER

TRIMMINGS, JOHN P

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/037,541	BROWN ET AL.	
	Examiner	Art Unit	
	John P Trimmings	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to applicant's amendment dated 10/18/2004.

Claims 1-3, 6, 7, 9, 10, 12, 14 and 17 were amended.

Claims 21-25 were add as new.

Claims 1-25 are pending.

Response to Amendment

As per Objections to the Disclosure:

1. In view of the applicant's changes to the specification, the examiner's objections to both the drawings and the specification are withdrawn, and the examiner approves said changes to the specification.
2. In view of the changes to Claims 1, 6, 7, 9, 12 and 14 in respect to the phrase "adapted to", the examiner withdraws all objections to said claims.
3. In view of the changes to Claim 16 in respect indenting steps, the examiner withdraws the objection to said claim.
4. Applicant's arguments with respect to the examiner's objection to Claim 20 have been fully considered and are persuasive. The objection to Claim 20 has been withdrawn.

As per Rejections under 35 USC 112:

5. In view of the amendments to Claims 2, 3 and 10, the examiner withdraws the rejections based on 35 USC 112, but the examiner does not agree with the applicant in that the amendments "do not alter the scope of the claims". The examiner, being one

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with ordinary skill, recognizes that JTAG adopted a specific interface (a TAP interface), using physical signals, and that in order to communicate on such an interface, rules were established for this interface in that only specific signals are used. However, any methodology that one may choose may be carried over such an interface at a higher level, and so the methodologies (as amended by the applicant) described in the claims may be used within the TAP interface. Therefore, the examiner feels that the scope of the claims, after correction for "methodology" in the amendments, was changed from indefinite to definite.

6. In view of the amendments to Claims 7, 14 and 17, the examiner withdraws the rejections based on 35 USC 112.

As per Rejections under 35 USC 103:

7. Applicant's arguments, with respect to claims 1-15, have been considered but are moot in view of the new grounds of rejection, necessitated by the change in scope ("remote computer") of Claims 1 and 9. See rejections below.

8. Applicant's arguments, filed 10/18/2004, with respect to Claims 16-20, have been fully considered but they are not persuasive. The applicant argues Claim 16, with dependent Claims 17-20 standing or falling with Claim 16. The applicant argues that the examiner has claimed "inherency" in the rejection of the claim without any basis in fact. But the examiner disagrees, because the wording in the examiner's rejection (i.e., "one with ordinary skill in the art would know that [the device] would contain these two features ...") is a statement of official notice by the examiner. The statement by the examiner only serves to notify the applicant that "IOP" as defined in the applicant's

disclosure is obviously the same as the management controller of the reference. The basis for this statement of obviousness in the prior action by the examiner is further supported by Li et al. in FIG.4 and in column 3 lines 10-13 ("management controller 14 may be a processor..."), and column 5 lines 7-10 ("management controller 102 ... transfer[s] test results ... through [a] modem ... or Ethernet ..."). The combination of the two features (processor and transfer agent) strongly suggested to the examiner that the management controller was an I/O (interface with modem/Ethernet) Processor or, in the words of the applicant, an "IOP". Therefore, the examiner stands on the statement notifying the applicant that the IOP is obvious. Next, the applicant argues that Falik does not additionally support the IOP because an I/O device is not an I/O Processor. But the examiner disagrees, because it is obvious, and is well known in the art, that an I/O device contains an input/output processor which monitors and controls the transfer of data to and from the device. And, in order to overcome the applicant's claim, the examiner had chosen to include the controllers of each reference, Li and Falik, since both strongly suggested the use of a controller that performed the same function as the applicant's IOP. Therefore, the examiner maintains the rejection of Claim 16, and in view of Claims 17-10 being dependent on Claim 16, Claims 16-20 are maintained as being rejected.

Claim Rejections - 35 USC § 103

Claims 1-15 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al., U.S. Patent No. 6598193, and further in view of Falik et al., U.S. Patent No. 6065078.

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As per Claims 1 and 9:

Li et al. teaches a managed server (column 2 line 13-14) and a management controller disposed in a managed server (FIG.1), comprising an embedded JTAG master having a JTAG interface (FIG.1 and FIG.2 42); and at least one integrated circuit disposed in the managed server (FIG.4 South Bridge 130 within 128 and column 4 lines 56-65) and connected for operative communication to the JTAG interface (via FIG.4 118 and FIG.3 42), and wherein the JTAG master is adapted to be accessed remotely (column 5 lines 7-15) through the remote server management controller (FIG.4 120 via modem and 106 or 118 via ethernet and 120) to provide communication between a remote computer (column 5 lines 7-16, "remote system" 126) and the at least one integrated circuit via the JTAG interface (example: FIG.4 128 to JTAG 118 to 102 and memory to TEST LOG 20, then 126 to 122 to 102, then access memory TEST LOG 20 of FIG.1), and control of the JTAG interface is derived from the management controller (column 4 lines 8-20). Li et al. fails to specifically cite an "IOP" (IO Processor) which would be the "management controller comprising: an IOP" as claimed, and a JTAG "master" interface. But one with ordinary skill in the art would know that the management controller of Li et al. would contain a processor (FIG.4 and in column 3 lines 10-13, "management controller 14 may be a processor..."). And it would also be well known that an I/O controller is suggested in Li et al. column 5 lines 7-10 ("management controller 102 ... transfer[s] test results ... through [a] modem ... or Ethernet ..."). The combination of the two features (processor and transfer agent) strongly suggested to the examiner that the management controller is an I/O (interface

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with modem/Ethernet) Processor or, in the words of the applicant, an "IOP". And a "master" interface is considered by the examiner to be the standard TAP interface required by the JTAG Standard, which is a well-known interface in the art. And Li et al. has operatively combined the management controller with these two features (see FIG.1, 2 and 4). And, in an analogous art, Falik et al. does cite these features. An IOP (FIG.21 1844c which is an I/O circuit) is connected to the JTAG Controller (FIG.21 1841, and column 3 lines 17-35 which describes 1841 as containing TAP Controller 102), teaching the combination of an IOP with JTAG in testing an integrated circuit (FIG.21 1840). Falik et al., in column 1 lines 13-50 states an advantage of testing multiple ICs using only one debugger (TAP Controller). One with ordinary skill in the art at the time of the invention, motivated by Falik et al., would combine the teachings of one controller in testing more than one IC in a multi-processor system, with the invention of Li et al. in order to increase the testing capabilities of Li et al. to encompass a multi-processor system.

As per Claims 2, 3 and 10;

The claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al., U.S. Patent No. 6598193, in view of Falik et al., U.S. Patent No. 6065078, as applied to Claims 1 and 9 above. Li et al. and Falik et al. teach the server management controller of claim 1 or 9 wherein the JTAG interface uses an ICE or ITP methodology. The examiner reminds the applicant that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the

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prior art structure is capable of performing the intended use, then it meets the claim.

See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). And in view of the motivation previously stated, the claims are rejected.

As per Claims 4 and 11:

Falik et al. further teaches the server management controller of claim 1 or 9 wherein the at least one integrated circuit comprises a microprocessor (FIG.21 1840). And in view of the motivation previously stated, the claims are rejected. And in view of the motivation previously stated, the claims are rejected.

As per Claims 5 and 13:

Li et al. further teaches the server management controller of claim 1 or 9, wherein the at least one integrated circuit comprises a component of a chipset (column 1 lines 5-8). And in view of the motivation previously stated, the claims are rejected.

As per Claims 6 and 12:

Li et al. further teaches the server management controller or method of claim 1, 9 or 16 wherein the JTAG master is adapted to program the at least one integrated circuit (column 5 lines 53-58). And in view of the motivation previously stated, the claims are rejected.

As per Claims 7 and 14:

Li et al. further teaches the server management controller or method of claim 1, 9 or 16 further comprising programming the IOP to control the JTAG master to perform a boundary scan of the integrated circuit when the managed server is powered up

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(column 5 lines 23-26 and column 1 lines 22-32). And in view of the motivation previously stated, the claims are rejected.

As per Claims 8 and 15:

Li et al. further teaches the server management controller or method of claim 1, 9 or 16 further comprising programming the IOP with descriptive data about the integrated circuit (column 6 lines 32-33). And in view of the motivation previously stated, the claims are rejected.

As per Claim 21:

Li et al. teaches a method of using a computer comprising; connecting a computer to a remote server management controller disposed in a managed server; and communicating with an integrated circuit disposed in the managed server via a JTAG interface associated with the remote server management controller (see Background and Summary of invention, also column 5 lines 1-16, and FIG.4 126 to 102 via 122, 120, and 102 to 128 via JTAG 118). And in view of the motivation previously stated, the claim is rejected.

As per Claim 22:

Li et al. further teaches the method, as set forth in claim 21, wherein communicating with the integrated circuit is controlled by an IOP. The IOP, as described in Claims 1 and 9, is used, and in view of the motivation previously stated, the claim is rejected.

As per Claim 23:

Falik et al. further teaches the method, as set forth in claim 21, wherein the integrated circuit comprises a microprocessor (FIG.21 1840). And in view of the motivation previously stated, the claim is rejected.

As per Claim 24:

Li et al. teaches a method of manufacturing a computer comprising: disposing a remote server management controller in a server (FIG.1), the remote server management controller comprising: an IOP (as in Claim 1); an embedded JTAG master (FIG.1 16) that is controllable by the IOP, the embedded JTAG master having a JTAG interface (FIG.2 42, FIG.4 118); and an integrated circuit disposed in the managed server and connected for operative communication to the JTAG interface (FIG.4 128 via 118), and wherein the JTAG master is configured to be accessed remotely through the remote server management controller to provide communication between a client computer and the integrated circuit via the JTAG interface (column 5 lines 1-16). And in view of the motivation previously stated, the claim is rejected.

As per Claim 25:

Li et al. further teaches the method, as set forth in claim 24, wherein the integrated circuit is located on a motherboard (see Background, and column 6 lines 30-31). And in view of the motivation previously stated, the claim is rejected.

Conclusion

In conclusion;

Claims 1-15 are rejected under 35 USC 103 based on a change in scope of the claims.

Claims 16-20 are maintained as being rejected under 35 USC 103.

New Claims 21-25 are rejected under 35 USC 103.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P Trimmings whose telephone number is (703) 272-3830. The examiner can normally be reached on Monday through Thursday, 7:30 AM to 6:00 PM.

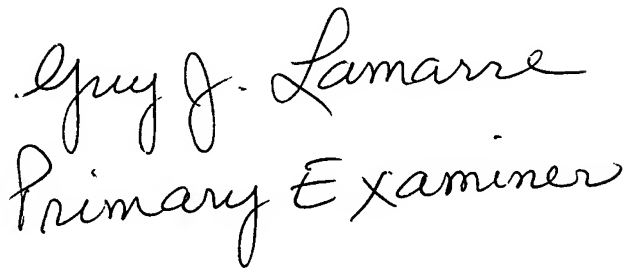
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (703) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John P Trimmings
Examiner
Art Unit 2133

jt



Primary Examiner